

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

## PCT

see form PCT/ISA/220

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day month year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

#### FOR FURTHER ACTION

See paragraph 2 below

International application No  
PCT/GB2004/000352

International filing date (day month year)  
29.01.2004

Priority date (day month year)  
30.01.2003

International Patent Classification (IPC) or both national classification and IPC  
A61M16/06

Applicant  
THE BOC GROUP PLC

#### 1 This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

#### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

#### 3 For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA

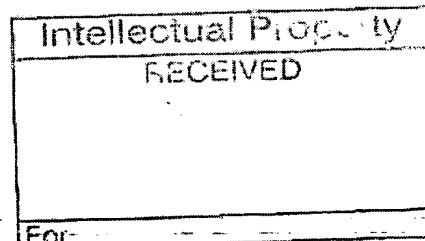


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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2004/000352

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2004/000352

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**Box No. II Priority**

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1. ☒ The following document has not been furnished:

- ☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).
- ☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

|                               |             |           |
|-------------------------------|-------------|-----------|
| Novelty (N)                   | Yes: Claims | 2-4, 9-11 |
|                               | No: Claims  | 1, 5-8    |
| Inventive step (IS)           | Yes: Claims | -         |
|                               | No: Claims  | 1-11      |
| Industrial applicability (IA) | Yes: Claims | 1-11      |
|                               | No: Claims  | -         |

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The subject-matter of claim 1 is not new (Article 33(2) PCT).

Document US-A-4535767 discloses:

a nasal cannula (10) suitable for delivering a breathable gas mixture comprising helium and oxygen to patient, the nasal cannula (10) comprising a length of high pressure narrow bore tubing (22) having a proximal end region (26) for connection to a high pressure source (column 3, lines 40, 41) of the pressure breathable gas mixture and a distal end region (20) connected to at least one nasal administration device (10), wherein the nasal administration device (10) has at least one orifice (12) suitable for the expansion of the breathable gas mixture

The subject-matter of claim 1 is not new. This objection also holds in view of document WO-A-99/24101 (see page 10, line 1 to page 15, line 18). US-A-4535767 additionally disclose the features of dependent claims 5 to 8 (US-A-4535767: figure 2 and column 3, lines 40-41).

Dependent claims 2 to 4 and 9 to 11 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step (Article 33(3) PCT), the reasons being as follows:

The features referred to in these claims (material choice, mixture composition, storage pressure) all appear to relate to normal design features in the field of respiratory aid.

The nasal cannula disclosed in claim 1 is industrial manufacturable and therefore the requirements of Article 33(4) PCT are met. Claims 2 to 11 depend from claim 1 and refer to further embodiments of the nasal cannula described therein and thus meet the requirements of Article 33(4) PCT for the same reason.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB04/00352

The above objection to novelty arises, as the term "for" merely implies that the nasal cannula and orifice have to be suitable for carrying out the above functions. The terminology of claim 1 is not clear (Article 6 PCT) in that the definition of "high pressure" makes use of a relative term. This type of formulation should be avoided when attempting to distinguish the application from the prior art.

In this case, it leaves the reader in doubt as to the exact range intended. Additionally, the range disclosed in the description has a specific technical side-effect: the warming up of the breathable air mixture. This makes the features of dependent claim 10 essential features (Article 6 and Rule 6.3(b) PCT).